



Research and development
Series B
Short-term statistics



Statistics, telematic networks and EDI bulletin

1 □ 1998

AIM FOR 90% TELE-TRANSMISSION BY 1999

In September 1996, the Statistical Programme Committee endorsed the STNE recommendation to commit all DSIS organisations to have good commonly available telematic services in full operation by the end of 1997, or by mid-1998 at the latest. Most organisations have, or are close to, implementing good telematic infrastructures.

The benefits of having a good telematic infrastructure in operation within and between members of the Community Statistical System are beginning to accrue as user orientated services are being added. Demonstrable user orientated services include: a clearly defined and verifiable means of supplying data electronically to Eurostat through the STADIUM service; better access to published statistical data from Data Shops; easy access to committee and working group documents and effective e-mail communications between participants.

The Email for Administrations and Groups project is currently supporting thirty Eurostat working groups. The aim is to considerably increase the number of working groups which use e-mail.

Eurostat's Board of Directors decided in September 1997 that 90% of regular and stable data flows should be exchanged electronically via STADIUM by the end of 1999. To assist this aim, an inventory of all data flows to Eurostat is being compiled. Some Member States are making an active contribution toward compiling this inventory. They can look forward to benefiting from this improved knowledge and from transmitting most of their statistical data electronically.

IDA II



The first phase of the IDA Programme, (Interchange of Data between Administrations), is coming to an end and a new programme is being proposed.

The new programme will provide a framework for the development of telematic services which support the Internal Market and the implementation of Community policies and activities, and improve inter-institutional communications.

The framework aims to establish a level of service which allows information to be easily and reliably exchanged regardless of the underlying systems or technical platform.

The outcome of the proposal for a EUROPEAN PARLIAMENT AND COUNCIL DECISION on a series of guidelines, including the identification of projects of common interest, for trans-European networks for the electronic Interchange of Data between Administrations (IDA) is expected during 1998.

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STATISTICAL OFFICE OF THE EUROPEAN COMMUNITIES

L-2920 Luxembourg — Tél. 4301-1 — Télex COMEUR LU 3423

B-1049 Bruxelles, rue de la Loi 200 — Tél. 299 11 11

Contact

Directorate A: Statistical Information Systems: research and data analysis:
technical cooperation with Phare and Tacis countries.

Jean Viseur

Eurostat

Jean Monnet Building - B3/045, L-2920 Luxembourg

Phone: +352 4301 32931

Fax: +352 4301 32999

Internet: Secretariat.STNE@eurostat.cec.be

STNE Working Group Meeting

The STNE working group met on 23 & 24 October 1997 under the chairmanship of Wolfgang Knüppel, Head of Unit, Eurostat-A2. STNE successes were identified as well as areas where improvements could be made, in order to encourage increased participation from Member States.

This was the first meeting for which participants were able to get most of the relevant meeting documents from the STNE Interest Group on the DSIS-IRC Web Site. The experiment was not without its problems and useful lessons about access and availability were learnt. Without doubt, the DSIS-IRC is a very useful facility although it cannot become the sole means of dissemination until all participants have good telematic services, in particular e-mail and ideally Internet access.



Security of data during electronic transmission is of great concern to some Member States.

The general opinion is that most data flows are not confidential and thus the concern only relates to a small proportion of data exchanged.

However, the security policy of some countries, such as Finland, specifically forbids the transmission of sensitive data via electronic networks.

In collaboration with NSIs, Eurostat will identify and report on the nature and significance of threats, and counter-measures. The legal constraints, if any, imposed by each country's system will be taken into account. Eurostat plans to report by the end of 1997.

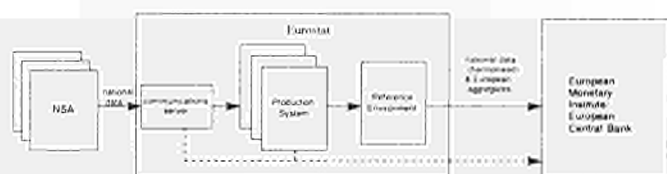
ERE & DSIS Metadata Service

Work continues on the implementation of the European Reference Environment (ERE) and the establishment of DSIS metadata services.

The exploitation of telematic networks to provide greater access to statistical data becomes ever more a topic of debate within the Community Statistical System. The European Reference Environment aims to provide a collection of quality reference data, based on collaboration agreements between partners aimed at regulating content, format and availability. The necessary hardware and software components may already be available, giving wider access to the Internet and the World Wide Web and the provision of value-added network services, such as TESTA. But how can statisticians and others with a legitimate

interest be sure of the comparability and quality of the data that they can browse, download or receive directly in their mailboxes?

The ERE concept is currently being tested in the run up to Stage 3 of Economic and Monetary Union. In addition to statistics that will be collected from National Central Banks, the European Monetary Institute has requested Eurostat to provide both national statistics and European aggregates across the whole spectrum of the statistical system - from National Accounts and Balance of Payments to industrial indicators and population figures. This proposed exchange raises many issues in terms of quality, timeliness and format, which both institutions are working to resolve.



Elsewhere at Eurostat, on-line access to reference data via the World Wide Web has been tested in several countries, with varying results. The twin issues of security and poor response time remain the greatest blocking factors to the exploitation of the Internet for this purpose. The first can be addressed by the implementation of access controls at the host site; the second is more difficult to resolve.

The DSIS metadata service has been specified, designed and prototyped. Now it is time to start active trials involving selected National Statistical Institutes and Eurostat units, using test data within the priority statistical domains specified by the STNE. The aim is to test the concept of the whole service, not just the supporting computer system. Amongst the trial scenarios are the dissemination of copies of DSIS metadata on a scheduled and ad hoc basis, the provision of browsing facilities via the World Wide Web and integration with local metadata services within NSIs. Exactly what is meant by 'DSIS metadata' remains a hot topic of discussion at the Metadata Task Force. National experts agree on the inclusion of 'common' metadata but are having difficulties in establishing where the line should subsequently be drawn.

Data Shop Network



Suppose you are an economist looking for harmonised statistics available over a 10 year period on wage levels, wage costs and unemployment rates for the main European countries, the USA and Japan.

Or....

You might be an industrialist seeking monthly statistics on imports and exports between France and its main trading partners for ten specific products.

Where would you find this information? The answer is: at a Data Shop.

The Data Shop is exactly what its name implies: a high street shop where individual organisations, companies or member of the general public can request in person, telephone, fax, normal mail or electronic mail, general information on harmonised and comparable EU statistics. It is also possible to order selected extracts from databases and paper and electronic publications. In addition Eurostat publications can be disseminated. Information can be provided on diskette, magnetic tape, print-out or CD-ROM. Each shop is a joint venture between a local service company and Eurostat. Most shops are located in a prominent public location, displaying the partner's name and the Eurostat logo.



There are Data Shops available in most European countries and even in the United States. The first Data Shop outside the EU was opened in New York in

October 1996. By the end of 1997, the network should cover every country in the EU.

There are 70 million items of harmonised and comparable statistical data available. The top six requests handled by the Data Shops are:

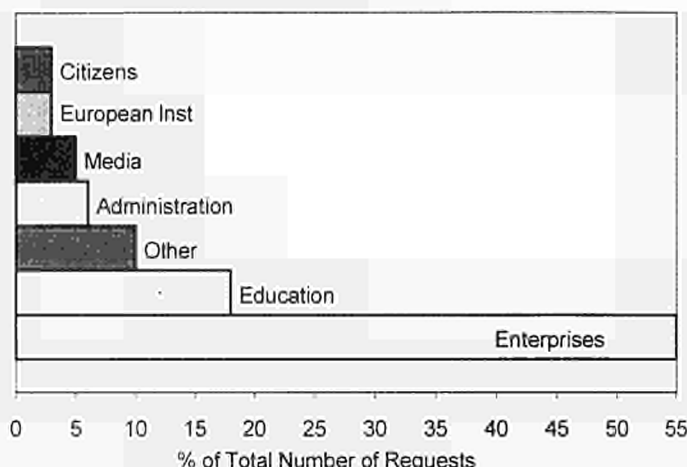
- import and export statistics
- regional figures (industry, revenue, demographics)
- social conditions
- foreign/immigrant populations
- industrial production indices, energy etc.
- Maastricht convergence criteria (who's in the club, who's not)

With other areas available such as:

- environment
- research and development
- agriculture and fisheries

The Data Shops cater for many different types of customers ranging from individual citizens to enterprises and administrations. A chart showing the distribution of customers using the data shops is shown below.

Data Shops Customer Profile



Customers are charged according to the type of service provided and quantity of statistical data delivered. The Data Shop in Paris charges approximately FF 300 for a statistics table covering fifteen member states. Data takes up to twenty four hours to be retrieved and is sent to customers using the method of transmission requested.

After the opening of the Paris Data Shop, Mr Yves - Thibault de Silguy, the member of the Commission responsible for Economic and Financial Affairs, Money Matters and the Statistical Office said that:

" The Data Shop Network is an indispensable link in the chain of statistical information on European integration, and offers a vast range of reliable, comparable and harmonised EU data, which are essential for grasping political, economic and social realities and providing a solid basis for making decisions. Access to this information is all the more important in view of the fact that the EU is by far France's largest market for exports and imports of goods and services".

Information about Data Shops can be obtained from the Eurostat Web site at:

<http://europa.eu.int/en/comm/eurostat/>

EDI For Foreign Trade Data



Until recently Competent National Administrations transmitted foreign trade data using magnetic tapes etc.

In 1997 the electronic transfer of Intra and Extra community trade data from Member States to Eurostat has been introduced in a number of countries.

Why change now ?

Most people will agree that magnetic tape technology has served us well over the past number of years. However, this technology is now out-dated.

A Pre-analysis Report was completed in Eurostat which showed that it was both technically and economically feasible to send data electronically to Eurostat.

Most of the processes between the Providers of Statistical Information (PSIs) and Competent National Administrations (CNAs) have been automated in the context of the EDICOM Project. However, the process of transmission of data between the CNAs and Eurostat needed to be streamlined.

Status

Since the initial proposal by Eurostat, 11 Member States have indicated that they will send their data electronically to Eurostat, during 1997. We are awaiting replies from two other Member States.

The Dutch Statistical Office (CBS) were the first Member State to send their data electronically (zipped and password protected) to Eurostat on the 4 December 1996. A total of 42 megabytes of data was transmitted within one hour.

Test transmissions have already been carried out with Austria. Denmark and France will conduct pilot tests soon.

Benefits to Member States include:

- an average of five tapes per month are sent by each Member State to Eurostat, at a cost of

approximately ECU 180 per month, per Member State;

- if, for example, Internet is used, the cost is in the region of ECU 25 per month, per Member State;
- delays in sending data can be kept to an absolute minimum, reduced from weeks to a matter of hours in all cases;
- the cost of setting up the new system will be kept to an absolute minimum as the infrastructure already exists in Member States;
- Eurostat can supply Member States with software to be used in the transmission of data, if required, such as STATEL, STADIUM and Eurostat recommended DES Encryption software.

Benefits to Eurostat:

- in the case of some Member States, it can take up to two weeks from the time the tape is sent to being received in Eurostat!
- Eurostat will receive the data within hours instead of weeks in all cases, if electronic transmission is used;
- less manual procedures for the data production area of Eurostat;
- quicker loading of data to the COMEXT II database;
- Eurostat will be able to disseminate the data (COMEXT II) faster to the Member States;
- less work for the Computer Centre in relation to the tape library management system;
- considerable savings for Eurostat in that they will no longer have to return data tapes to Member States.

If you require further information or a copy of the Pre-analysis Report, please contact:

X.400: c=be;a=rt;p=cec;o=eurostat;s=kunzler;g=uwe
Internet: Uwe.Kunzler@eurostat.cec.be
telephone: + 352-4301- 32344

The infrastructure, expertise and technology is already in place. Let's do it!



Raw Data Collection

TELER (TELeomatics Enterprise Reporting)

European enterprises pay a higher and higher cost incurred by the "informational harassment", that is by the requirements of data from all sorts of public administrations, tax and customs authorities, statistical institutes and other benefit agencies. This is a stumbling block for our competitiveness that cannot be borne any longer. The simplification of surveys and declarations at Government and Parliament level is a good idea, but it is far from enough. The use of telematics for data transmission is also necessary. However, a closer look at technical systems shows that they are not always sufficient.

It may be simpler for a company to send a form by paper mail than by e-mail.

What is most time-consuming is to find the appropriate basic data, to convert them into the required information for the period and with the nomenclature requested, to fill in the form and to check any mistakes.

Now, when trying to implement automated systems that will directly draw and format data from enterprise information systems (accounts, pay roll, etc.) to submit them by data communication, new problems arise:

- smaller companies (SMEs, and especially very small enterprises) do not have the appropriate computerised systems, as they entrust their accounting firm to handle their management system;
- companies belonging to a structured professional association, are already sending information and do not wish to send it twice;
- public administrations use different systems, both in technical terms and in terms of data format and definition; concepts are different;
- therefore, a single system cannot be adapted to all kinds of situation. It is necessary to design a consistent system, with variants adapted to the size and industry of the enterprise, to the country and national practices.

Technical solution envisaged

The solution must lie in the identity of concepts and approaches and of basic functions. However, it must be adapted to specific situations in terms of organisation (who does what?) and of operational technical specifications. The overall consistency must also be ensured.

To meet this goal, the TELER project is designing an ambitious system that will cover all situations. It does not iron out the issues of simplification (such as merging surveys into "combi-questionnaires" for example). This system is based on "metadata", i.e. a standardised description of the meaning of data. There are two sets of metadata, one which describes the data items as they are stored in the enterprise information system (or in the system of its accounting firm or its professional association) and one set which describes the variables as requested by the data collector. Each set of metadata is a reflection of the conceptual world of the enterprise on the one side and of the data collector on the other.

Transformation rules are identified which enable a move from the enterprise's metadata to the data collector's metadata. There are three rule categories:

- transcoding rules: for example, to transform data using the Customs classification of products into the standard classification used by statistical institutes;
- aggregation rules: for example, value for first quarter = Sum (value for January + February + March);
- combination rules: for example, to compute a variable which is not available in the company information system into the requested variable; e.g. production = sales + stock variation.

With this background, software agents will be developed in order to:

- implement the metadata describing the computerised data at the enterprise (or its accounting firm, or its professional association) and the metadata describing each survey. This description is to be done once only;
- extract the required data elements;
- apply the transformation rules;
- prepare and format the "answering file";
- send it to the data collector.

Base d'Information Statistique de l'Entreprise

It is possible to build an intermediary data base, called BISE (Base d'Information Statistique de l'Entreprise), a reservoir from which all surveys and declarations will be prepared. This device enables BISE to be fed on an on-going basis, while declarations are sent periodically.

This software will be implemented in standard technical environments, to encourage the adhesion of smaller organisations: PCs, modems, Windows, etc. Several transmission systems will be used (Internet, X.25, etc.).

Results expected

Tests will be carried out with national statistical returns on structural enterprise surveys, the European Community of Steel and Coal (ECSC) surveys and fiscal declarations. There will be eight validation sites (in the Netherlands, Sweden, Finland, Germany, Italy, Portugal, and two in France). Work has also been carried out in the United-Kingdom, Greece and Spain.

The dissemination of streamlined software packages is, indeed, out of reach. The objective of TELER is to prepare prototypes and to test them in a variety of situations. The major expectation is that software houses throughout Europe will be interested in taking up the prototypes to develop packages, either stand alone packages or as modules embedded in regular accounting or payroll packages. Such add-ons have already been implemented for the VAT declarations and there is a good hope that the market will adopt such a business approach, which is the success factor for efficiency and a guarantee of quick return on investment for enterprises.

At the present stage (mid-1997), the general outlines of the system ("the common approach") and the global specifications in each variant have been completed. The prototypes will be tested in early 1998 and the project will end in March 1999.

Contact details

The TELER consortium consists of :

- the statistical institutes of the Netherlands, Sweden, Finland, Germany, Italy, Portugal (Spain, France and United-Kingdom being closely associated; the other EU statistical institutes periodically review the achievements within a User Group);
- the European association of the iron and steel industry, Eurofer and its French, British and German members;
- the European federation of accountants EDIFICAS, its French member and Datacare an Irish software house;
- CESIA, a French consulting group, as the coordinator.

Details can be found on the Web site at <http://www.indigo.ie/Datacare/teler/teler.htm>

E-mail between the European Commission and the Member State Administrations

Introduction

Since 1995, the IDA Programme (Interchange of Data between Administrations) has been promoting and supporting the use of e-mail to exchange documents and data between the European Commission (EC) and the Member State Administrations (MSAs). In 1995 and 1996 the E-Mail for Committee Members project piloted the use of E-mail for a limited number of committees and working groups, among which SPC and STNE WG of Eurostat were included. Based on the encouraging results at these and other committees and working groups, in 1997, the E-Mail for Administrations and Groups (EM4AG) project was launched. The main objectives of this 3 year project are:

- to support *more committees/working groups* with the use of e-mail;
- to *integrate* the use of e-mail with other technologies, thus creating a *critical mass* of e-mail use.

The EM4AG project is currently supporting 30-40 Eurostat committees and working groups with the use of e-mail!

Integration with new technologies

The STNE Working Group is currently piloting with the DSIS Information Resource Centre (DSIS-IRC) on the World Wide Web, (<http://europa.eu.int:8000/dsis-irc/>) which brings STNE documents, meeting schedules, membership information and more to the desktop of the STNE members. The members can access the DSIS-IRC (also developed under the IDA programme) with a common Internet browser to gain access to all this information.

The use of e-mail is efficiently *integrated* in the DSIS-IRC. For example, the STNE members can request that a notification be sent to them every time a new document is placed on the STNE Interest Group. They can also send a simple e-mail reply to this notification message to request a copy of the actual document

Optimising benefits for MSAs

For the MSAs, one of the main benefits is the efficient integration of these new technologies with local workflow procedures. Such benefits can already be derived by using the e-mail interface effectively through the implementation of *stable addresses* (the

use of which is being recommended by Eurostat). Stable addresses (also called functional addresses) are not directly associated to a single person, but rather to the 'function' of the address, e.g.

documents.stne@statistic.institute.ms

One typical example is the use of a *functional mailbox* associated to this address; the secretariat of the MSA handles the reception, printing, archiving and internal distribution of the documents received in this mailbox. Access to the functional mailbox can be shared by many different secretaries. Another typical example is to associate a *distribution list* to the stable address; in this case, the documents sent to the stable address would be distributed automatically to all the people defined in the list, e.g. the MSA representatives for reading and the MSA secretariat for printing and archiving.

It is important to realise that such stable addresses offer the same benefits for the use of the DSIS-IRC: if efficiently configured, all representatives of an MSA can be automatically notified of the availability of a new document - those interested can request a copy of the document by replying to the notification.

Optimal service on a technical level

Most of the e-mail messages that are currently sent out by the Commission are sent out in either MIME/base64 format (to the Internet) or X.400(84) format. X.400(84) users can only receive "undefined" file attachments: the *type* of the attachment (such as ".doc" or ".xls") is not carried with the message. Consequently, they need special viewers to be able to automatically open and view attached documents. A better level of service would be obtained if files were communicated in X.400(88) format (which is already being used internal to the Commission), an upgrade of X.400(84) which also carries the file type.

Therefore, to promote an optimal service level between the EC and MSAs, it is recommended that the E-mail systems be either Internet/MIME compliant or X.400(88) compliant.

Change of e-mail provider

Now that many Eurostat committees are starting to use e-mail, it is extremely important to communicate any changes in MSA e-mail systems. Therefore, when a change in the e-mail system occurs (e.g. a different e-mail provider is chosen which brings about different e-mail addresses) the MSAs are kindly requested to communicate this change to the Help Desk of the EM4AG project. The Help Desk will then take care

that the changes are communicated to all interested parties within Eurostat.

The EM4AG Help Desk

Telephone	+32 2 745 0 821
Fax	+32 2 705 5 193
X.400	s=helpdesk; o=committees; p=logica; a=rtt; c=be
Internet	ctt1@brussels.logica.com

Farewell to Philippe Lebaube

It is with regret that we saw the departure of Philippe Lebaube this October from Eurostat-A2 to become a Head of Unit at Office for Official Publications for the European Communities (OPOCE) - OP5 Electronic Publishing and Internet Dissemination.



Since 1992, Philippe Lebaube has been a leading light in the DSIS framework and subsequent STNE Work Programme. More recently he has been the principal co-ordinator and technical strategist for the development of informatics in support of the Community Statistical System. As part of this work, he was an advocate of standardisation measures and

was the chairman of the Expert Group 6 for Statistics.



Philippe's new role at OPOCE involves one of his favourite hobbies; wind surfing. He will be surfing the Web, and let us hope that he still finds the time to surf the waves!

Statistics, Telematic Networks and EDI Working Group (STNE WG)

The secretariat of the STNE WG is provided by Eurostat-A2. The contact is Mr Jean Viseur.

The national representatives are:

Member State	Representative	Organisation
Austria	Günther Zettl	Austrian Central Statistical Office
Belgium	Claude Delannoy	Institut National de Statistiques
Denmark	Soren Netterstrom	Danmarks Statistik
Ireland	Margaret McLoughlin	Central Statistics Office
Finland	Kauko Hämäläinen	Statistics Finland
France	Jean-Pierre Granjean	Institut National de la Statistique et des Études Économiques - France
Germany	Elmar Kalthoff	Statistisches Bundesamt
Greece	Giorgios Spanogiannopoulos	National Statistical Service of Greece
Italy	Rossana Balestrino	Istituto Nazionale di Statistica - Italy
Luxembourg	Nico Weydert	Service Central de la Statistique et des Études Économiques - Luxembourg
The Netherlands	Kees-Jan Metz	Central Bureau of Statistics
Norway	Claude Courbat	Statistics Norway
Portugal	Humberto Correia	Instituto Nacional de Estatistica
Spain	Armando de la Torre del Rio	Instituto Nacional de Estadistica
Sweden	Erik Malmberg	Statistics Sweden
United Kingdom	Robin Pape	Office of National Statistics

Observers are:

Member State	Representative	Organisation
Hungary	Maria Takacs	Office of National Statistics
Lithuania	Edmundas Zvirblis	Department of National Statistics
Switzerland	Beat Hulliger-Dominguez	Swiss Federal Statistical Office

Glossary

BISE	Base d'Information Statistique de l'Entreprise
CFF	Common File Format
CLASET	An EDI message for the exchange of classifications
CMFB	Committee on Monetary, Financial and Balance Of Payment Statistics
CNA	Competent National Administration
DSIS - IRC	Distributed Statistical Information Services / Information Resource Centre
EBES	European Board for EDI standardisation
ECSC	European Community of Steel and Coal
ECU	European Currency Unit
EDI	Electronic Data Interchange
EDICOM	Electronic Data Interchange for COMmerce - Eurostat initiative
EDIFACT	Electronic Data Interchange for Administration, Commerce, and Transport
EEG6	Expert Group 6 for Statistics
E-MAIL	Electronic Mail
EMI	European Monetary Institute
ERE	European Reference Environment
GESMES	An EDI message - Generic Statistical Message - for the exchange of any type of multi-dimensional data or chronological series
IDA	Interchange of Data between Administrations - a DGIII programme
IDA/TAC	Telematics in Administrations Committee - DGIII
MSA	Member State Administration
NSA	National Statistical Administration
NSI	National Statistical Institute
SPC	Statistical Programme Committee
STADIUM	An electronic data collection and dissemination centre
STATEL	An application to application telecommunications protocol
STNE WG	Statistics, Telematic Networks, and EDI Working Group - Eurostat
TESTA	Trans-European Services for Telematics between Administrations

Key Documents:

DSIS Progress Report to STNE WG Meeting N°8

DSIS Metadata Task Force Report

Dates for Your Diary:

<i>Meeting</i>	<i>Date</i>	<i>Location</i>
STNE Working Group meeting n°8	31 March & 1 April 1998	Eurostat - Luxembourg

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 Fax (32-2) 511 01 84

Jean De Lannoy
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 B-1060 Bruxelles/Brussel
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NEDERLAND
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